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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/086,477	03/01/2002	Sean C. Semple	INEX.P-006-2	3225

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EXAMINER	
NGUYEN, DAVE TRONG	
ART UNIT	PAPER NUMBER
1632	

DATE MAILED: 12/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/086,477	SEMPLE ET AL.	
	Examiner	Art Unit	
	Dave T Nguyen	1632	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) *2,4,13 and 15* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,5-12,14 and 16-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Applicant's election with traverse of Group I claims, claims 3 and 14, and the lipid species of DODMA, and the polypeptide in the response filed 9/24/03 is acknowledged.

After a further consideration of prior art, the species DOPTAP or DODAP in the form of cationic lipid has also been rejoined and thereby will be examined along with the elected species of DODMA.

Applicant traverses that no undue burden has been demonstrated by the examiner, and that the class and subclass are the same for the three inventions. However, the fact that the class and subclass are the same for distinct invention does not necessarily mean that the restriction is not proper. For example, Group I claims are directed to the concept of employing a nucleic acid polymer that must contain a CpG motif, which motif contributes and/or effect a stimulation of an immune response. However, not only group 2 claims or group 3 claims do not claim such CpG motif containing nucleic acid polymer, the claims in Group 2 could be reasonably be construed that the nucleic acid polymer does not have any sequence or motif that specifically contributes or effect an immunostimulation, and the claims in Group 3 claim that the nucleic acid polymer is lacking any motif and/or sequence that cause an immunostimulation. As such, a search of Group I claims clearly does not overlap with that of either Group 2 or 3 claims. This non-overlapped search, let alone consideration of the breadth of the Group 2 or 3 claims during examination, is indicative of a required undue burden upon the examiner. Applicant further traverses that the "non-sequence

specific immunostimulatory polymer" as recited in Group II claims is generic to the CpG motif containing oligonucleotide of Group I claims, since the immune response is general and not targeted to a specific antigen based on the sequences of the nucleic acid, *e.g.,* page 60, lines 5-10. In response, the examiner maintains that neither the claims in Group II nor page 60, lines 5-10, provide any definition as to what is exactly meant by the "non-sequence specific immunostimulatory polymer". In fact, on contrary to applicant's assertion that the specification on page 60, lines 5-10 teaches that "CpG motifs are one form of non-sequence specific immunostimulatory sequences, since the immune response is general and not targeted to a specific antigen based on the sequence of the nucleic acid, the specification on page 60, lines 5-10 states:

The nucleic acid in the composition of the invention may suitably be nucleic acids which are not complementary to the genome of the treated mammal, and which provide immunostimulation through a mechanism which does not depend on a complementary base-pairing interation with nucleic acids of the mammal. Such nucleic acids will frequenly contain an immunostimulatory sequene, such as a CpG motif or an immune stimulating palindrome.

Such disclosure is not the same as asserted in applicant's response. In fact, the specification does not appear to provide any antecedent basis for the "non-sequence specific immunostimulatory polymer". Thus, to the extent that the claims in Group II do not employ the language written on page 60, lines 5-10, the claim language in Group II such as the "non-sequence specific

immunostimulatory polymer" could be reasonably construed as non-CpG motif containing DNA, which is neither padrinomic nor complementary to a sequence present in the genome of a treated mammal, and yet is immunostimulatory. In view of the reasons set forth above, the restriction between all of the Groups remain proper. Should applicant amend the claims of Group II to:

The composition according to claim 1, wherein the nucleic acid polymer includes at least one CpG motif or a palidromic motif,

The claims will be rejoined to the elected Group I claims for examination.

Claims 2, 4, 13, 15 have been withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected claimed invention.

Claims 1, 3, 5-12, 14, 16-21 are pending for examination.

The cross-reference information is objected because the status of the parent applications have not been updated.

Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 as follows:

The second application (which is called a continuation) must be an application for a patent for an invention which is also disclosed in the first application (the parent or provisional application); the disclosure of the invention in the parent application and in the continuing application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *In re Ahlbrecht,* 168 USPQ 293 (CCPA 1971). With respect to the elected species of DODMA, only the parent application, 09/078,954, filed May 14, 1998, appears to

provide written support for the elected species. With respect to a composition comprising a generic nucleic acid polymer, only the '954 application provides sufficient guidance and teachings for the making of a DNA delivery composition comprising a cationic lipid and a DNA nucleic acid polymer, such description and/or contemplation of the making of DNA/cationic lipid composition for the purpose of using the composition simply as a DNA delivery composition is not the same as claiming now the elected invention of a DNA polymer that must contain at least one CpG motif. Not all DNA nucleic acid polymers necessarily contain a CpG motif. Such particular citation of the elected species, wherein the only usage of the CpG motif is to induce an immune response is not recognized in the parent '954 application. Therefore, the parent application '954 application does not contain an adequate support of description the elected species of DODMA and the elected nucleic acid polymer which must contain a CpG motif. Thus, the priority for the claims readable on the conception of making and use of cationic lipid/DNA complexes, wherein the DNA comprises at least one CpG motif and wherein the cationic lipid is DODMA, and wherein the complexes further comprises an antigenic antigen can only be established on the filing date of the parent application 09/649,527 application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1, 3, 6, 20 are rejected under 35 U.S.C. 102(e) or 102(b) as being anticipated by Felgner *et al.* (US Pat No. 5,703,055), as evidenced by Bei *et al.* (J. Immunotherapy, 21, 3, pages 159-169, 1998)

The claims are readable on a composition comprising a cationic amphiphile/biologically active molecule (DNA, RNA, polypeptides) contained composition regardless of the structure of the amphiphile and/or DNA so as to stimulate an immunostimulatory activity in a mammal, so long as the DNA is encapsulated in a lipid particle comprising a cationic lipid. The '055 patent discloses a method for generating an immunostimulatory activity in a mammal by employing a cationic lipid/DNA complex, wherein said complex comprises a transduced vector or a polynucleotide expressing an antigen and any known cationic lipid/co-lipid complex, *e.g.,* DOTAP, columns 25 and 26. Delivery of the complex to tumor cell is disclosed on column 19, lines 40-45 and column 21, lines 21-26. Felgner *et al.* teach that "the

polynucleotide material delivered to the cells *in vivo* can take any number of forms" (column 10). Suitable promoters, *e.g.*, RSV, SV40, and CMV, are disclosed on column 10. The polynucleotides can be delivered by injection to the interstitial space of tissues of the animal body, including those of muscle, skin, brain, lung, and connective tissues (see column 13). More specifically, the '055 patent teaches that "the parenteral route of injection into the interstitial space of tissues is preferred, although other parenteral routes, such as inhalation of an aerosol formulation, may be required in specific administration, as for example to the mucous membranes of the nose, throat, bronchial tissues or lungs" (column 24). Felgner *et al.* disclose that "the polynucleotides may be injected into muscle or skin using an injection syringe...or...using a vaccine gun" (column 20). Regarding the DNA injection methods using a cationic lipid, Felgner *et al.* teach many suitable liposome forming cationic lipid compounds for use in the transient gene therapy method are described in the literature and available commercially (column 26). Specific examples demonstrating an antibody immune response against an antigen are disclosed in Examples 7-16 (tail vein injections, direct injection into the muscle, intratracheal and liver injections). Methods employing intravenous injections of a cationic lipid/DNA complex to deliver biologically active molecules including an interferon gene to human patients are disclosed at column 18, first paragraph. Note that column 24 of Felgner states:

> The science of forming liposomes is now well-developed. Liposomes are unilamellar or multilamellar vesicles, having a membrane portion formed of lipophilic material and an interior aqueous portion. The aqueous portion is used in the present invention to contain the polynucleotide material to be delivered to the target cell. It is preferred that the liposome forming materials used herein have a cationic group, such as a quarternary ammonium group, and one or more lipophilic groups , such as saturated or unsaturated alkyl groups having from about 6 to 30 carton atoms.

Thus, since the cationic lipid/DNA complexes, *e.g.,* well-known encapsulation technique is disclosed on last paragraph of column 24, and/or materially method steps of Felgner are identical to that of the claims of this instant application, and given the factual evidence shown by the Bei reference which indicates that cationic liposomes formulation (DOTAP) does stimulate immune responses and are themselves immunoadjuvant (entire document, especially the abstract), the cationic lipid/DNA complexes including the DOTAP lipid/DNA composition of Felgner *et al.* must inherently exhibit the property of immunostimulatory activity in a mammal.

As such, one of ordinary skill in the art would have recognized that at the time the invention was made, it is well-accepted within the scientific community and the level of a person of ordinary skill in the art, the making and use of liposomal particle comprising a cationic lipid, which encapsulates a nucleic acid polymer, is conventional. Note that MPEP 2114 indicates that "MANNER OF

OPERATING THE DEVICE DOES NOT DIFFERENTIATE APPARATUS CLAIM FROM THE PRIOR ART".

Claims 1, 3, 5, 7-12, 14, 16, 20-21 are rejected under 35 USC 102(a) or 102(e) as being anticipated by Krieg *et al.* (US Pat No. 6,207,646).

The essential feature of the presently pending claims is that any cationic lipid including can be used for a method of inducing an immune response when used in combination with a CpG containing nucleic acid polymer, and a drug and/or antigenic polypeptide (antigens). Krieg *et al.* teach that cationic lipid carriers (column 12, lines 25-34) can be employed in combination with a CpG motif containing nucleic acid polymer as immunostimulatory nucleic acid complex and with a drug antigen when employed for induction of an immune response to a target antigen. The 646 patent teach the same throughout the disclosure (particularly columns 29-35, columns 61-64).

Krieg states on column 12:

> An "oligonucleotide delivery complex" shall mean an oligonucleotide associated with (e.g. ionically or covalently bound to; or encapsulated within a targeting means (e.g. a molecule that results in higher affinity binding to target cell (e.g. B-cell and natural killer NK) cell) surfaces and/or increased cellular uptake by target cells). Examples of oligonucleotide delivery complexes include oligonucleotides associated with: a sterol (e.g. cholesterol), a lipid (e.g. a cationic lipid, virosome or liposome), or a target cell specific binding agent (e.g. a ligand recognized by target cell specific receptor). Preferred complexes must be sufficiently stable in vivo to prevent significant uncoupling prior to internalization by the target cell. However, the complex should be cleavable under appropriate conditions within the cell so that the oligonucleotide is released in a functional form.

As such, Krieg does teach that his CpG containing nucleic acid polymer or oligonucleotide can be encapsulated within an oligonucleotide delivery complex, and that the complex includes a cationic lipid-based lipid and an antigen of choice. While Krieg does not teach detailed description of a method of how to make such oligonucleotide delivery lipid that encapsulates a CpG containing oligonucleotide, such method is well-recognized in the prior art of record. Absent evidence to the contrary, the compositions and the methods disclosed in Krieg *et al.* have all of the properties cited in the claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order

for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 3, 5-12, 14, 16-21 are rejected under 35 USC 103 as being unpatentable over Felgner *et al.,* taken with Krieg, and either Meers *et al.* (US Pat No. 6,143,716) or Wheeler *et al.* (US Pat No. 5,976,567), and further in view of applicant's admission over the prior art on pages 7 and 11 of the specification.

The rejection of the base claims as being anticipated by Felgner is applied here as indicated above. To the extent that the references do not teach further incorporations of known components (see pages 7 and 11 of the specification, for example) for additive effects, *e.g.,* CpG containing motifs with proper flanking residues that contributes to the immunostimulatory effects, steric barrier lipid (PEG-lipid), drugs, cytotoxic agents, modified DNA with phosphodiester bonds, and/or recombinant antigen, or antigen encoded plasmids, it would have been obvious for one of ordinary skill in the art as a matter of design choice, of minor modifications, or of a combination effect, to employ any and/or all other components are recited in the claims, *e.g.,* CpG containing motifs with proper flanking residues that contributes to the immunostimulatory effects, steric barrier lipid (PEG-lipid), drugs, cytotoxic agents, modified DNA with phosphodiester bonds, and/or recombinant antigen, or antigen encoded plasmids in the immunogenic compositions of any of the primary references. One of ordinary skill in the art would have been motivated to employ known immunostimulatory and/or therapeutic enhancing materials in the prior art so

as to enhance addictive effects of the compositions taught in the primary references. Note that Krieg (WO 96/02555) as exemplified on page 7 of the specification, does teach the concept of adding known immunostimulatory materials including CpG motif containing oligos and/or recombinant antigens to known plasmid DNA vaccines is well established in the prior art of record. In addition, note also that Meers *et al.* teach on column 9 that additive components that are known to exhibit a therapeutically enhancing effects, *e.g.,* drugs, protein drugs, peptide drugs, can be used in a plasmid/DNA complexes so as to provide therapeutically addictive effect in a treated mammal.

The skilled artisan would also have been motivated to employ a DODMA and DODAP/PEG-lipid/DOPE as the lipid of choice for encapsulating any nucleic acid plasmid disclosed in Felgner because not only the primary references teach that cationic lipids are effective encapsulating delivery liposome, Wheeler *et al.* (column 50, example 26) and Meers *et al.* also teach that DODMA and DODAP/PEG-lipid/DOPE, respectively, are also effective as a vector for delivering and expressing any desire DNA in cells of a mammal. Note also that Meers *et al.* teach on column 9 that additive components that are known to exhibit a therapeutically enhancing effects, *e.g.,* drugs, protein drugs, peptide drugs, can be used in a plasmid/DNA complexes so as to provide therapeutically addictive effect in a treated mammal. Thus, an addition of well-recognized immune-stimulating agents including those of protein drugs to the teachings provided by the combined cited references would have been minor modifications so as to provide addictive or combination effects, and

thereby, would have been obvious to one skilled in the art at the time the invention was made.

Thus, the claimed invention as a whole was *prima facie* obvious.

Claims 1, 6, 11, 17-19 are rejected under 35 USC 103 as being unpatentable over Krieg *et al.* (US Pat No. 6,207,646), taken with Wheeler *et al.* (US Pat No. 5,976,567) or Meers *et al.* (US Pat No. 6,143,716).

The claims are directed to the elected species, which claim an immunostimulating composition comprising a lipid particle comprising a cationic lipid composed of DODMA or DODAP, which encapsulates a CpG containing nucleic acid polymer,, which by themselves are also immunostimulatory nucleic acid molecules. Krieg *et al.* teach that cationic lipid carriers (column 12, lines 25-34) can be employed in combination with a CpG motif containing nucleic acid polymer as immunostimulatory nucleic acid complex and with an antigen when employed for induction of an immune response to a target antigen. The 646 patent teaches the same throughout the disclosure (particularly columns 29-35, columns 61-64).

Krieg states on column 12:

> An "oligonucleotide delivery complex" shall mean an oligonucleotide associated with (e.g. ionically or covalently bound to; or encapsulated within a targeting means (e.g. a molecule that results in higher affinity binding to target cell (e.g. B-cell and natural killer NK) cell) surfaces and/or increased cellular uptake by target cells). Examples of oligonucleotide delivery complexes include oligonucleotides associated with: a sterol (e.g. cholesterol), a lipid (e.g. a cationic lipid, virosome or liposome), or a target cell specific binding agent (e.g. a ligand recognized by target cell specific

> receptor). Preferred complexes must be sufficiently stable in vivo to prevent significant uncoupling prior to internalization by the target cell. However, the complex should be cleavable under appropriate conditions within the cell so that the oligonucleotide is released in a functional form.

Krieg does not teach specifically that the liposomal vesicles contain a particular cationic lipid such as DODMA or DODAP and/or PEG-lipid as stabilizer for the nucleic acid delivery complexes.

However, at the time the invention was made, McCluskie *et al.* (page 307 through page 308) do teach that cationic lipids, which themselves are effective conventional carriers for enhancing the delivery and expression of a target nucleic acid polymer, can also be used as effective adjuvant for the purpose of inducing an immune response against a target antigen.

In addition, Wheeler *et al.* and Meers *et al.* do teach that DODMA (column 50, example 26) and DODAP/PEG-lipid/DOPE (columns 8 and 9), respectively, also effective carriers for delivering and expressing any desire DNA molecule in a mammal. Wheeler on column 11, last paragraph, clearly teaches that the nucleic acids are typically nucleotide polymers having from 10 to 100,000 nucleotide residues, and that the nucleic acids include oligonucleotides containing nucleic acid analogs, and that the nucleic acids can be single-stranded DNA.

One of ordinary skill in the art would have been motivated to have employed a cationic lipid including DODMA or DODAP on the basis of teaching provided by Wheeler or Meers in the method of Krieg so as to enhance an immune response

against a target antigen. The skilled artisan would have been motivated to employ DODMA and DODAP/PEG-lipid/DOPE as the lipid of choice because not only the combined cited references teach that cationic lipids are effective delivery carriers,, Wheeler *et al.* and Meers *et al.* also teach that DODMA and DODAP/PEG-lipid/DOPE, respectively, are also effective as a vector for delivering any desire DNA in cells of a mammal. Note also that Meers *et al.* teach on column 9 that additive components that are known to exhibit a therapeutically enhancing effects, *e.g.,* drugs, protein drugs, peptide drugs, can be used in a plasmid/DNA complexes so as to provide therapeutically addictive effect in a treated mammal. Thus, an addition of well-recognized immune-stimulating agents including those of protein drugs to the teachings provided by the combined cited references would have been minor modifications so as to provide addictive effects, and thereby, would have been obvious to one skilled in the art at the time the invention was made.

Thus, the claimed invention as a whole was *prima facie* obvious.

In summary, the first issue is whether or not the prior art of record teaches an encapsulating lipid carrier. The stated rejections of record do provide evidentiary support to demonstrate that the concept of making an encapsulating lipid carrier as an oligonucleotide delivery complex is routine and conventional in the prior art of record. The second issue is whether or not a skilled artisan would have been motivated to employ the DODMA and DODAP/PEG-lipid/DOPE of Wheeler or Meers as an encapsulating lipid delivery vector. Thus, the stated rejection of record does teach, suggest, and provide a motivation for a skilled

artisan to employ the DODMA and DODAP/PEG-lipid/DOPE of Wheeler or Meers as an encapsulating lipid delivery vector to deliver the oligonucleotide of Krieg. The third issue is the priority issue. Again, in view of the fact and reasons set forth in the above preceding paragraphs, a skilled artisan would have recognized that applicant, at the time prior to the filing date of the '527 application, was not contemplating a generic invention of using specifically just a CpG containing nucleic acid polymer as an immunostimulatory agent, and was not contemplating a specific combination of any immunostimulatory cationic lipid based lipid and specifically a CpG containing nucleic acid polymer.

To further indicate that the concept of employing cationic lipid based encapsulation of nucleic acid is well-known at the time the invention was made, the following references, in addition to the already cited Wheeler I, Wheeler II, Wheeler III and Bailey, are cited to further demonstrated that it is well recognized within the scientific community that it is conventional in the prior art to encapsulate biologically active molecules including negatively charged DNA by using a cationic liposome:

McEver (US Pat No. 5,605,821, first full paragraph of column 21); Chang (US 2002/0162123, Boulikas (US Pat No. 6,030,956, column 13).

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claims 1, 3, 5-12, 14, 16-21 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1, 3, 5-12, 14, 16-21 of copending Application No. 09/649,527. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 7-9, and 20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim of U.S. Patent No. 6,287,591. Although the conflicting claims are not identical, they are not patentably distinct from each other because

The examined claims and patent claims are all directed a generic composition comprising a nucleic acid polymer encapsulated in a lipid particle comprising a cationic lipid, and a PEG-lipid. The fact that the examined claims recite the newly found property of the composition claims do not render the claims not being obvious variants of those as claimed in the issued patents.

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner *Dave Nguyen* whose telephone number is **(703) 305-2024**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Deborah Reynolds*, may be reached at **(703) 305-4051.**

Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CM1 Fax Center number is **(703) 305-7401**.

Any inquiry of a general nature or relating to the status of this application should be directed to the *Group receptionist* whose telephone number is **(703) 308-0196**.

Please note that the examiner is expected to move to a new US PTO office building located in Alexandria on January 12, 2004. The examiner office phone number at the new building is **571-272-0731.**

Dave Nguyen
Primary Examiner
Art Unit: 1632

DAVE T. NGUYEN
PRIMARY EXAMINER